

COMPLETE LISTING OF THE CLAIMS

Upon entry of the present amendment, the claims will stand as follows:

1-9 (Withdrawn)

10. (Previously Amended) A method of selecting a compound that interferes with binding of a synaptic activation protein to a cellular binding protein ~~in the mammalian central nervous system~~, comprising:

adding a test compound to a reaction mixture containing (i) an isolated synaptic activation protein having at least 70% sequence identity to a polypeptide having the sequence SEQ ID NO: 2, (ii) an isolated binding protein to which the synaptic activation protein binds, and (iii) means for detecting binding between the synaptic activation protein and the binding protein; measuring binding between the synaptic activation protein and the binding protein; and

selecting the compound if the measured binding is greater than or less than binding measured in the absence of the test compound.

11. (Previously Amended) The method of claim 10, wherein the binding protein is a metabotropic glutamate receptor (mGluR).

12. (Withdrawn)

13. (Currently Amended) The method of claim 10, wherein the ~~binding protein is a metabotropic glutamate receptor comprising~~ mGluR comprises a sequence selected from the group consisting of SSSL (SEQ ID NO: 10) and SSTL (SEQ ID NO: 11).

14. (Currently Amended) The method of claim 13, wherein the mGluR is selected from mGluR5 and mGluR1 α .

15. (Currently Amended) The method of claim 10, wherein the synaptic activation protein is a Homer protein having the sequence SEQ ID NO: 2.

16. (Currently Amended) The method of claim 10, wherein the synaptic activation protein is ~~in solid phase~~ coated onto a solid phase.

17. (Previously Added) The method of claim 16, wherein the solid phase is a microtiter plate.

18. (Previously Added) The method of claim 10, wherein the means for detecting binding is a glutathione-S-transferase (GST)-pulldown.

19. (Previously Added) The method of claim 10, wherein the means for detecting binding is coimmunoprecipitation.

20. (Previously Added) The method of claim 10, wherein the measuring binding comprises labeling the binding protein, wherein the labeling is direct labeling or is subsequent addition of a labeled, binding protein-specific reagent.

21. (Previously Added) The method of claim 20, wherein the binding protein-specific reagent is an antibody.

22. (Previously Added) The method of claim 20, wherein the labeling comprises use of an enzyme capable of generating a signal, use of a radiolabeled reagent, use of a fluorescent dye, or use of gold or biotin.

23. (Currently Amended) The method of claim 22, wherein the radiolabeled reagent is labeled with ~~125I~~ ¹²⁵I.

24-43 (Withdrawn)